

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/457,841

Filing Date: December 9, 1999

Title: COMPUTER CONFIGURATION RESTORE METHOD AND APPARATUS

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consists of an actuation of a single switch or key, or a simultaneous key combination of the computer.

33. (New) The machine-readable medium of claim 17, wherein the non-interactive user input does not require user entry of information or interfacing with a graphical representation to function.

34. (New) The method of claim 10, wherein the non-interactive user input consists of an actuation of a single switch or key, or a simultaneous key combination of the computer.

35. (New) The method of claim 10, wherein the known-good configuration is restored without rebooting the computer.

REMARKS

Claims 20-35 are added by this Amendment, and claims 11-15, 18 and 19 are canceled. As a result, claims 1-10, 16, 17 and 20-35 are pending in the application.

The Office Action includes: i) a Restriction Requirement; ii) a rejection of claims 1, 9, 16 and 18-19 under 35 U.S.C. §102(b) in view of "Linux Kernel Howto" by (hereinafter "the Linux document"); iii) a rejection of claims 2, 3, 5, 7, 8, 10 and 17 under 35 U.S.C. §103(a) in view of the Linux document; iv) a rejection of claims 4 and 6 under 35 U.S.C. §103(a) in view of the Linux document and further in view of so-called AAPA. There have been no objections raised against the Drawings. Regarding the Restriction Requirement, the election of Group I comprising claims 1-10 and 16-19 is hereby affirmed.

§102 Rejection of the Claims

The §102(e) rejection of claims 1, 9 and 16 in view of the Linux document is respectfully traversed, for at least the reasons set forth herein. The rejection of claims 18 and 19 has been obviated since these claims are canceled herein.

As many computer users have discovered, the installation of new hardware or software sometimes results a computer configuration which does not operate properly. Conventional systems have been proposed in an attempt to solve these problems. For example, PictureTaker is a

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software product which keeps a log of configuration changes and allows a user to restore the system configuration to a previous state that is believed to be good. However, to restore the system to a previous state, the PictureTaker software requires a user to boot the operating system and execute the PictureTaker software. Hence, PictureTaker would not be able to restore a good configuration if a configuration error exists which won't allow the system to fully boot. The present invention overcomes the problems of the conventional approaches.

The present invention involves new systems and methods for backing up and restoring configurations for a computer which are known to be good. This is done, in accordance with the present invention, by restoring a known good configuration using a non-interactive user input. In embodiments of the present invention the non-interactive user input device is a user input device that can be actuated without visual indication to the user or user interaction with software. As such, the present invention does not require use of a graphical user interface or the entry of values prompted by a software program. For example, while other systems may require loading an operation system and graphical user interface, and then executing a program, the present invention relies upon a non-interactive input device such as a switch to trigger restoration of the known good configuration. The documents relied upon in the pending rejection are subject to the same drawbacks of conventional systems, as discussed in the Background of the application.

The Office Action relies upon the Linux document, asserting that this document teaches all the features of the rejected claims. This assertion is respectfully traversed. The Linux document mentions that a user can make a backup copy of an old kernel, and then outlines an involved procedure for booting to the old kernel—just in case the new kernel gets “flooziert” up. The procedure outlined in the Linux document is as follows:

To be able to boot one of your old kernels off the hard disk (another way to save yourself in case you floozie up the new kernel), copy the lines (including the line) “image=xxx” in the lilo config file to the bottom of the file, and change the “image=xxx” to “image=yyy,” where “yyy” is the name of the thing you saved your backup kernel to. Then, change the “label=xxx” to something like “label=linux-backup.” Then, rerun lilo. You may have to put a line in the config file saying “delay=x,” where x is an amount in tenths of a second. That's to make lilo wait before booting, so you can interrupt it (with the shift key, for example), and type in the label of the backup boot image (in case unpleasant things happen).¹

¹ Linux document, page 9, 3rd full paragraph.

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The procedure outlined in the Linux document does not use a non-interactive user input. The procedure calls for the user to reboot the computer, then interrupt the lilo while the computer is being rebooted, then modify a line to the label of a backup boot image (e.g., image = yyy). Consequently, the Linux document does not disclose "restor[ing] the known-good configuration via non-interactive user input," as recited in claim 1 and in claim 16; or "actuating a non-interactive user input that causes software executing on the computer to restore the known-good configuration," as recited in claim 9.

Accordingly, the Linux document does not disclose the features of the claimed invention. Therefore, withdrawal of the §102 rejection is respectfully requested.

§103 Rejection: The Linux Document Teaches Away

The §103(a) rejection of claims 2, 3, 5, 7, 8, 10 and 17 in view of the Linux document, and the §103(a) rejection of claims 4 and 6 in view of Linux and further in view of so-called AAPA, are respectfully traversed, for at least the reasons set forth herein.

As discussed above, the Linux document does not disclose use of a non-interactive user input. Further, it is respectfully submitted that the Linux document teaches away from this feature of the present invention, thus rendering the obviousness rejection improper in accordance with MPEP 2143.1, which states:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.²

To be able to boot to a previous configuration, the Linux document requires that a user retrieve the lilo file, modify the lilo code (e.g., modify the image to "image = yyy"), and then save the lilo file and reboot the computer system. In fact, the Linux document mentions that a user may even have to introduce a new line in the lilo to delay the boot process, in order to manually interrupt the normal boot routine, in addition to retrieving, modifying and saving the Linux lilo. Consequently, the Linux document, taken singly or in view of the so-called AAPA, teaches away from the present invention, which recites "restor[ing] the known-good configuration via non-interactive user input,"

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as recited in claim 1 and in claim 16; or "actuating a non-interactive user input that causes software executing on the computer to restore the known-good configuration," as recited in claim 9. Moreover, the Background of the present application does not overcome the deficiencies of the Linux document. For at least these reasons, the pending obviousness-type rejections under §103 are improper.

Accordingly, the Linux document and the so-called AAPA, either taken singly or as a hypothetical combination, does not disclose the features of the claimed invention. Therefore, withdrawal of the §102 rejection is respectfully requested.

Conclusion

It is respectfully submitted that the claims are in condition for allowance. Accordingly, notification to that effect is earnestly requested. In the event that issues arise in the application which may readily be resolved via telephone, the Examiner is kindly invited to telephone the Gateway, Inc. attorney at (605)232-1967 to facilitate prosecution of the application.

It is believed that the attached Fee Transmittal attends to the appropriate fees owed for the present Amendment. However, if necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

Date: November 12, 2002

By



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² MPEP 2143.1 citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

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APPENDIX

CLEAN VERSION OF AMENDMENTS

No claims are amended by the present Amendment.

Claims 20-35 (New).